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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Johan Massee

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EXAMINER

TOLAN, EDWARD THOMAS

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

12/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,758	Applicant(s) MASSEE, JOHAN	
	Examiner EDWARD TOLAN	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-16,19-22 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-16,19-22 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,7-10,16,20 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfingston (2,645,954). Pfingston discloses a method of manufacturing a product having a constant outer diameter in which a workpiece is clamped down (col. 4, line 25) and a first set of forming rollers (14) are rotated relative to the workpiece about a common axis of rotation (col. 4, lines 17-22), wherein the rollers (14) take up a first same axial position with respect to the workpiece. The workpiece is deformed (col. 4, lines 29-32) by the forming rollers (14) as they move in a direction along the axis of rotation. A second set of rollers (15) are positioned at a second same axial position at a position behind the first set (14) in order to deform the workpiece (col. 4, lines 35-40). The roller sets (14,15) are each mounted on a common holder (10) and the holder rotates the rollers (15) positioned at a lead angle (col. 3, lines 20-30) which crosses the axis of rotation. The first and second roller sets each comprise three forming rollers. The workpiece is formed in a single working cycle. A tensile force is applied to the workpiece to form internal threads and the force is varied because successive roller profiles are higher than one another (col. 3, lines 30-35) and bite into the workpiece at a greater depth.

Claims 1,7-11,16,20,22 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Schow (4,055,064). Schow discloses a method of manufacturing a product having a constant expanded diameter in which a workpiece is clamped (either on an existing automobile or inherently clamped on a vise in a mechanics shop) and a first set of forming rollers (30) are rotated relative to the workpiece about a common axis of rotation (col. 3, lines 28-31), wherein the rollers (30) take up a first same axial position with respect to the workpiece. The workpiece is deformed and expanded by the forming rollers (30) as they move in a direction along the axis of rotation. A second set of rollers (30) are positioned at a second same axial position at a position behind the first set (30) in order to deform the workpiece (col. 3, lines 31-35). The roller sets (30) are each mounted on a common holder (10) and the holder is radially adjusted (col. 3, lines 20-30) for operation by forming wedges (20,22). The first and second roller sets each comprise two forming rollers. The workpiece is formed in a single working cycle. A tensile force is applied to the workpiece by the internal mandrel wedges (20,22) and bolt (25) during expansion.

Claims 1,6,9,10,13-16,19-21 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Martelle (3,382,696). Martelle discloses a method of manufacturing a plate product having a constant reduced diameter in which a workpiece is clamped in a guide (3,12, col. 3, lines 58-75) and a first set of forming rollers (6) are rotated relative to the workpiece about a common axis of rotation (col. 2, lines 14-27), wherein the rollers (30) take up a first same axial position with respect to the workpiece as shown in fig. 1. The workpiece is deformed by the forming rollers (6) as they move in

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a direction along the axis of rotation. A second set of rollers (6) are positioned at a second same axial position at a position behind the first set in order to deform the workpiece. The roller sets (6) are each mounted on a common holder (7) and the holder is radially adjusted to provide a converging path and is positioned at an angle to the axis of rotation. The first and second roller sets each comprise two forming rollers. The workpiece is formed in a single working cycle. A tensile force is applied to the workpiece (col 1, lines 45-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Recksiek (DE 3423223) in view of Viltschek et al. (3,427,846). Recksiek discloses a method of manufacturing a product having a swaged and partially closed end diameter in which a workpiece is clamped and a first set of forming rollers (2a) are rotated relative to the workpiece about a common axis of rotation, wherein the rollers (2a) take up a first same axial position with respect to the workpiece. The workpiece is deformed by the forming rollers (2a) as they move in a direction along the axis of rotation to form the tube end. A second or more set of rollers (2b-2l) are positioned at a second same axial and further same axial positions at a position behind the first set (2a) in order to deform

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the workpiece. The roller sets (30) are each mounted on a common holder (1). The first and second roller sets each comprise three forming rollers. The workpiece is formed in a single working cycle. Recksiek does not disclose that the holder is pivoted about an angle that crosses the axis of rotation. Viltschek teaches that it is known to provide a tilting means (13,9,14,8,16) that pivots rollers (5,10). It would have been obvious to one skilled in the art at the time of invention to provide a pivoting means to the invention of Recksiek as taught by Viltschek in order to form contoured or bent tube ends.

Response to Arguments

Applicant's arguments with respect to claims 1,6-16,19-22 and 28 have been considered but are moot in view of the new ground(s) of rejection. Applicant has amended the scope of the claims by claiming constant diameter forming. Therefore the claims have been examined in response to the amendments and new rejections have been set forth. The Examiner withdraws the previous rejections using Takayama and Koizumi because they are applicable to forming work with varying diameters, but the Examiner does concede that the references are not applicable to claims concerning various diameter products.

The reference to Martelle is used to reject plate product claims. Martelle uses roller holders (7) oriented at an angle to a workpiece, wherein the roller holders are connected to a single holding means (1). The rollers move in relation to one another and synchronously in sets that deform the plate from either side thereof to form a plate product.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD TOLAN whose telephone number is (571)272-4525. The examiner can normally be reached on M-F.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Tolan/
Primary Examiner, Art Unit 3725